## WHAT IS CLAIMED IS:

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An image pickup apparatus comprising:

image pickup means for picking up an image of an object to output an image signal;

image processing means for processing the image signal to generate high-resolution image data and low-resolution image data;

designation means for outputting designation so as to cause said image processing means to process the image signals of a plurality of frames;

first storage means for storing the high- and low-resolution image data of the plurality of frames which are obtained by processing the image signals in accordance with the designation;

display means for displaying an image;

display control means for displaying the low-resolution image data of the plurality of frames stored in said first storage means on said display means;

compression encoding means for compressing and encoding, at a predetermined compression ratio, the high-resolution image data of the plurality of frames stored in said first storage means;

second storage means for storing the compressed and encoded image data of the plurality of frames; and

first selection means for selecting and outputting image data of a desired frame from the image data of

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the plurality of frames stored in said second storage means, on the basis of display of said display means.

- An apparatus according to claim 1, further comprising third storage means for storing the image data selected by said first selection means.
- An apparatus according to claim 1, further 3. comprising transmission means for transmitting the image data selected by said first selection means.
- An apparatus according to claim 1, wherein said apparatus further comprises second selection means for selecting a desired image from the plurality of images based on the low-resolution image data of the plurality of frame's displayed on said display means, and said display control means extracts image data corresponding to the image selected by said second selection means from the image data of the plurality of frames stored in said second storage means and enlarges and displays the extracted image data on said display means.
- 5. An apparatus according to claim 1, wherein said compression encoding means compresses and encodes 25 again the image data selected by said first selection means at a compression ratio different from the

predetermined compression ratio and stores the compressed and encoded image data in said second storage means.

6. An apparatus according to claim 1, wherein said image processing means processes the image signal obtained from said image pickup means to generate middle-resolution image data and stores the middle-resolution image data in said first storage means, and said display control means displays the stored middle-resolution image data on said display means.

7. An image pickup apparatus comprising:
image pickup means for picking up an image of an
object to output an image signal;

storage means for storing the image signal;
image evaluation means for analyzing and
evaluating the image signal stored in said storage
means and classifying an evaluation result into types
in accordance with a predetermined discrimination
reference; and

display means for displaying the classified types.

8. An apparatus according to claim 7, wherein said display means displays the type together with a corresponding image.

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9. An apparatus according to claim 7, wherein said display means displays the type using audio information.

10. An apparatus according to claim 7, further comprising deletion means for deleting an image signal belonging to the classified type from said storage means.

11. An apparatus according to claim 7, wherein the type is at least one of underexposure, overexposure, and vibration.

12. An image pickup method comprising:

a step of picking up an image of an object to output an image signal;

a step of processing the image signal to generate high-resolution image data and low-resolution image data;

a step of outputting designation so as to process the image signals of a plurality of frames in the image processing step;

a first storage step of storing the high- and low-resolution image data of the plurality of frames which are obtained by processing the image signals in accordance with the designation;

a step of displaying an image;

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a step of displaying, in the display step, the low-resolution image data of the plurality of frames stored in the first storage step;

a step of compressing and encoding, at a predetermined compression ratio, the high-resolution image data of the plurality of frames stored in the first storage step;

a second storage step of storing the compressed and encoded image data of the plurality of frames; and

a first selection step of selecting and outputting image data of a desired frame from the image data of the plurality of frames stored in the second storage step, on the basis of display in the display step.

data selected in the first selection step.

14. A method according to claim 12, further
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selected in the first selection step.

15. A method according to claim 12, wherein said method further comprises a second selection step of selecting a desired image from the plurality of images based on the low-resolution image data of the plurality of frames displayed in the display step, and the

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display control step extracts image data corresponding to the image selected in the second selection step from the image data of the plurality of frames stored in the second storage step and enlarges and displays the extracted image data in the display step.

16. A method according to claim 12, wherein the compression encoding step compresses and encodes again the image data selected in the first selection step at a compression ratio different from the predetermined compression ratio and stores the compressed and encoded image data in the second storage step.

- A method according to claim 12, wherein the image processing step processes the image signal obtained in the image pickup step to generate middle-resolution image data and stores the middle-resolution image data in the first storage step, and the display control step displays the stored middle-resolution Amage data in the display step.
  - An image pickup method comprising: 18.
- a step of picking up an image of an object to output an image signal;
  - a step of storing the mage signal;
- a step of analyzing and evaluating the image signal stored in the storage step and classifying an

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evaluation result into types in accordance with a predetermined discrimination reference; and a step of displaying the classified types.

- 19. A method according to claim 18, wherein the display step displays the type together with a corresponding image.
- 20. A method according to claim 18, wherein the 10 display step displays the type using audio information.
  - 21. A method according to claim 18, further comprising a deletion step of deleting an image signal belonging to the classified type.

22. A method according to claim 18, wherein the type is at least one of underexposure, overexposure, and vibration.

20 23. A storage medium storing a control program for an image pickup apparatus in a state readable from a computer, the control program comprising:

a step of picking up an image of an object to output an image signal;

a step of processing the image signal to generate high-resolution image data and low-resolution image data;

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a step of output ting designation so as to process the image signals of a plurality of frames in the image processing step;

a first storage step of storing the high- and low-resolution image data of the plurality of frames which are obtained by processing the image signals in accordance with the designation;

a step of displaying an image;

a step of displaying, in the display step, the low-resolution image data of the plurality of frames stored in the first storage step;

a step of compressing and encoding, at a predetermined compression ratio, the high-resolution image data of the plurality of frames stored in the first storage step;

a second storage step of storing the compressed and encoded image data of the plurality of frames; and

a first selection step of selecting and outputting image data of a desired frame from the image data of the plurality of frames stored in the second storage step, on the basis of display in the display step.

24. A medium according to claim 23, wherein the control program further comprises a third storage step of storing the image data selected in the first selection step.

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25. A medium according to claim 23, wherein the control program further comprises a step of transmitting the image data selected in the first selection step.

26. A medium according to claim 23, wherein the control program further comprises a second selection step of selecting a desired image from the plurality of images based on the low-resolution image data of the plurality of frames displayed in the display step, and the display control step extracts image data corresponding to the image selected in the second selection step from the image data of the plurality of frames stored in the second storage step and enlarges and displays the extracted image data in the display step.

27. A medium according to claim 23, wherein the compression encoding step compresses and encodes again the image data selected in the first selection step at a compression ratio different from the predetermined compression ratio and stores the compressed and encoded image data in the second storage step.

28. A medium according to claim 23, wherein the image processing step processes the image signal obtained in the image pickup step to generate

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middle-resolution image data and stores the middle-resolution image data in the first storage step, and the display control step displays the stored middle-resolution image data in the display step.

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- 29. A storage medium storing a control program for an image pickup apparatus in a state readable from a computer, the control program comprising:
- a step of picking up an image of an object to output an image signal;
  - a step of storing the image signal;
- a step of analyzing and evaluating the image signal stored in the storage step and classifying an evaluation result into types in accordance with a predetermined discrimination reference; and
  - a step of displaying the classified types.
- 30. A medium according to claim 29, wherein the display step displays the type together with a corresponding image.
- 31. A medium according to claim 29, wherein the display step displays the type using audio information.
- 25 32. A medium according to claim 29, wherein the control program further comprises a deletion step of deleting an image signal belonging to the classified

type.

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33. A medium according to claim 29, wherein the type is at least one of underexposure, overexposure, and vibration.